

## Zeiss 1540XB FIB-SEM

## Instrument capabilities:

- 1. Instrument specifications:
  - 30 kV maximum accelerating voltage for both FIB and SEM
  - Schottky FEG emitter (SEM)
  - SEI resolution: 1.1 nm at 20 kV; 2.5 nm at 1.0 kV
- 2. Specimen stage:
  - 6-axis motorized eucentric stage.
  - Maximum sample size: 100 mm diameter.
- 3. Operating modes:
  - · simultaneous FIB (Ga-beam only) and SEM
  - 5 gas injectors and 3 in-situ manipulators
  - SEI, BEI, STEM
  - light element XEDS (mapping & spectrum imaging)
  - ion beam lithography

## **Typical experiments (examples):**

- > Site-specific TEM sample preparation
- > 3D data acquisiiton
- > nanofabrication and manipulation